

AMENDMENTS TO THE SPECIFICATION

Amend the paragraph beginning at page 12, line 12 as follows:

Referring now to **Fig. 1**, a schematic of a prior art PC metering system, generally designated **10**, is shown as an example of a mail generation system that creates and prints a mark **12** on mail item **14** in accordance with the present invention. In accordance with the present invention, mark **12** may include a two-dimensional bar code that contains conventional IBIP information, includes first handling postal authority indicator, value-added services information, such as confirmation notification information, and a-mailer identity information. PC meter **10** includes conventional PC **16**, display **18** and printer ~~1020~~. See U.S. Patent No. 5,781,438, assigned to the assignee of this application, which is hereby incorporated by reference for a more detailed description of a PC metering system.

Amend the paragraph beginning at page 14, line 5 as follows:

The final handling postal authority distribution network **205** includes conventional components such as: facer/canceller **210**; MLOCR (multi-line optical character reader) sorters **220** that typically perform a primary sort for mail items that have not been presorted; intermediate bar-code sorters **230**; postal transport means **240** for transporting the mail item from one postal facility to another; final bar code sorters **250**; and delivery means **260**, such as a mail carrier delivery to a mailbox. Delivery means **260** includes a scanner **262** for scanning mark **12** at the time of delivery. In accordance with the present invention, final handling postal authority distribution network **205** further includes a digital data capture scanner and processing computer system **270** that is optionally coupled to one or more of the aforementioned components of the final handling postal authority distribution network **205** for the purpose of capturing and processing information, including value-added services information, that is read from the mark of the mail item being processed. As information is captured

by digital data capture scanner and processing computer system 270, a mail item file 280 (described in detail below) is created. Final handling postal authority distribution network 205 determines the electronic address of first handling postal authority distribution network 105 from either a direct scanning of mark 12 of the mailpiece 14 or, preferably, by scanning mark 12 of mailpiece 14 for the first handling postal authority distribution network 105 identity and using database 290 for determining first handling postal authority distribution network 105 electronic address. If database 290 is implemented, changes in addresses may be made efficiently because the data table, rather than each postal authority, would require updating. Depending on the value-added services being processed, digital data capture scanner and processing computer system 270 communicates mail item file 280 through a public electronic communications network 300 to be ~~stored~~ used by with the first handling postal authority's digital data capture scanner and processing computer system 170 to update mail item file 190. Communications network ~~250-300~~ may be any conventional communications network, such as the Internet or a cellular/conventional telephonic network, or any combination thereof depending on the type of communication information read from the mark.

Amend the paragraph beginning at page 14, line 5 as follows:

Digital data capture scanner and processing computer system 170 of first handling postal authority distribution network 105 then determines the address of the original mailer using database 180 and communicates the stored mail item file 190 through use of public electronic communication network ~~250-310~~ to the mailer's computer systems 10 or a trusted third party repository ~~300~~320. The communication between mailer and the first handling postal authority is maintained confidential such that the final handling or any other postal authority is not provided access to the original mailer's electronic address.

Amend the paragraph beginning at page 15, line 19 as follows:

A4 Referring now to Fig. 3, a block representation of mail item file 300-190 that is created upon initial processing by first handling postal authority distribution network 105, ~~first for delivery to recipient~~, then updated by final handling postal authority distribution network 205 and delivered to first handling postal authority distribution network 105 and finally, delivered to the original mailer computer 16. Mail item file 300-190 may include: a header 305 of postal information that has been captured from mail item 14; a mail item identification number 310; mailer ID 315; and a list 318 of value-added services requested. The present invention provides for one or more of such requests. Mail item file 300-190 further includes various data elements 320 that are optionally captured depending on the value-added services requested. Data elements 320 may include induction time 330 and induction address 332 indicating when and where mail item 14 enters the postal distribution network 100; intermediate processing times 340; and intermediate processing addresses 342 indicating various stages of processing within the international postal distribution network 100, and delivery time 350 and delivery address 352 indicating when and where the mail item leaves the postal distribution network 100. Data elements 320 may further include information captured when the mark 12 was read, such as a hash value 360 of the contents of mail item 14 and a digital signature and/or certificate 370.

Amend the paragraph beginning at page 16, line 12 as follows:

A6 Now turning to Fig. 4 there is shown a flow chart of the process of creating a mail item according to the present invention. At step 400, the mail item preparation process begins. Address information is retrieved and payment information is computed including the unique mail item identifier (MailItemID) and mailer identifier (MailerID). At step 410, the process queries as to whether or not the retrieved address is international. If the answer to the query at step 410 is "no," then the process continues to step 420 where the mail item is processed through normal mail finishing. If, however, the answer to the query at step 410 is "yes," then the method continues to step 430. At step 430, the process queries

as to whether or not the mail item requires an electronic confirmation of service. If the answer to the query is "no," then, the process continues to step 420 where the mail item is processed through normal mail finishing. If, however, the answer to the query at step 430 is "yes," then the method continues to step 440 where a mailer electronic address (MEA) is retrieved for service confirmation, such as an e-mail, fax or pager address. At step 450, a public key (PK) of the postal administration of the first handling is retrieved. At step 460 using an RSA, DSA or an ECDSA algorithm, $[E_{PK} [MEA, MailItemID, MailerID]]$ is computed. $E_{PK} [MEA, MailItemID, MailerID]$, where E stands for operation of encryption, is the result of encryption of ~~data file~~ MEA, MailItemID, and MailerID. PK is a public key of the specially designated private-public key pair of public key cryptographic system of the postal operator of the country of first handling; MEA is Mailer's Electronic Address; MailItemID is a unique identity of the mail item; and MailerID is a unique identity of the mailer. The encryption operator E can be RSA, DSA or ECDSA or any other appropriate reversible type as described, for example, in (many different way are adequately described in *Handbook of Applied Cryptography*, by A. Menezes, P. Van Oorschot and S. Vanstone, CRC Press, 1997.)